REMARKS

Favorable reconsideration of this application in view of the remarks to follow is respectfully requested. Since the present Response raises no new issues and, in any event, places the application in better condition for consideration on appeal, entry thereof is respectfully requested.

In the present Office Action, Claim 68 has been objected to because it depends from a cancelled claim. In response to the claim objection, applicants have amended Claim 68 in the manner indicated **supra**. Specifically, applicants have changed the dependency of Claim 68 from Claim 58 to Claim 56.

Applicants respectfully submit that the above amendment to Claim 68 obviates the informal objection to the claim raised in the present Office Action. As such, applicants respectfully request reconsideration and withdrawal of the instant claim objection.

In addition to the above amendments to the claims, applicants have also cancelled Claims 35-55, as requested in the outstanding Office Action. The cancellation of Claims 35-55 is done without prejudice and/or disclaimer, as such, applicants reserve their right to file a divisional application directed to the cancelled subject matter set forth in Claims 35-55.

Applicants have also amended Claims 56 and 68 to positively recite the relationship of each of the regions to each other and to the corresponding common buried insulating layer. Specifically, and with respect to Claim 56, applicants have amended the claim to positively recite that the first single crystal semiconductor region *is laterally adjacent* to the second single crystal semiconductor region and *both regions are disposed directly on a common buried insulating layer* that lays atop a substrate. In a similar manner, Claim 69 has been amended to positively recite that the at least one single-layer semiconductor region *is laterally adjacent to* said at least one bilayer semiconductor region *and both regions are disposed directly* on a common buried insulating layer.

Support for the amendments to Claims 56 and 69 is found throughout the specification of the instant application. See, for example, paragraph [0011] as well as the drawings that are representative of the claimed invention.

Since the above amendments to the claims do not introduce any new matter into the instant application, entry thereof is respectfully requested. Applicants respectfully submit that the above amendments to the claims were made to better define the structural relationship between the claimed regions as well as their corresponding relationship to the common buried insulating layer.

Claim 56 stands rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 4,768,076 to Aoki et al. ("Aoki et al."). Claims 56, 57, 59-69 and 72-79 -69 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by applicants' own Admission of the prior art ("AAPA"). Claims 70 and 71 stand rejected under 35 U.S.C. § 103 as allegedly obvious from AAPA.

Concerning the § 102(b) rejections, it is axiomatic that anticipation under § 102 requires that the prior art reference disclose each and every element of the claim to which it is applied. In re King, 801 F.2d, 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1996). Thus, there must be no differences between the subject matter of the claim and the disclosure of the prior art reference. Stated another way, the reference must contain within its four corners adequate direction to practice the invention as claimed. The corollary of the rule is equally applicable: Absence from the applied reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Applicants respectfully submit that the structure recited in Claim 56 of the present application is not anticipated by the disclosure of Aoki et al. since the applied reference does not disclose *each and every element* of the claimed structure. Specifically, Aoki et al. do not disclose a

structure including a first single crystal semiconductor region of a first surface crystal orientation that *is laterally adjacent* to a second single crystal semiconductor region of a second surface crystal orientation that differs from the first surface crystal orientation and *both regions are disposed directly on a common buried insulating layer* that lays atop a substrate. In contrast, Aoki et al. disclose in FIG. 5 a structure including an n-type (100) Si substrate in which a p-channel MOS transistor is formed having (i) p-type impurities regions 64, 65 that serve as the source/drain regions, (ii) a polycrystalline Si layer 63 that serves as a gate, and (iii) an SiO_2 film 62 that serves as a gate insulating layer. The structure shown in FIG. 5 further includes isolation SiO_2 elements 61, Si_3N_4 film 67 and PSG film 73. A recrystallized Si layer 68 is shown atop a surface of silicon nitride film 67. An n-channel MOSFT transistor is formed having (i) n-type impurity regions 71, 72 that serve as source/drain regions, (ii) polycrystalline Si layer 70 that serves as the gate, and (iii) SiO_2 film 69 that serves as the gate dielectric. Reference numeral 74 denotes Al electrodes. Applicants note that the Si layer 60 and the overlying recrystallized Si layer 70 may have different crystal orientations.

Despite this disclosure, Aoki et al. do not disclose that the first and second semiconductor regions of different crystal orientation are both disposed directly on a *common buried insulating layer*. In contrast, the recrystallized Si layer 70 is disposed on a silicon nitride film 67, while if the Si layer 60 is the top layer of an SOI substrate, it would be disposed on a buried oxide. Thus, the claimed structure of the present application, as recited in Claim 56, is not anticipated by Aoki et al.

Moreover, in Aoki et al., the regions of different crystal orientations (i.e., Si layer 60 and recrystallized Si layer 70) are disposed on top of each other, not laterally adjacent to each other as presently claimed.

With respect to AAPA, applicants observe that the structures recited in the claims of the present application are not anticipated by the AAPA since AAPA does not disclose each and every

element of the claimed structures. Specifically, AAPA does not disclose a structure including a *first single crystal semiconductor region and a second single crystal semiconductor region that are both disposed directly on a common buried insulating layer which lays atop a substrate*, nor a structure including *one single-layer semiconductor region and at least one bilayer semiconductor region that are both disposed directly on a common buried insulating layer, said insulating layer is located on a substrate*. Applicants observe that in the present application prior art FIGS. 1-3 show embodiments in which one of the semiconductor regions of different crystal orientation is located on a buried insulating layer, while the other semiconductor region is not. In prior art FIG. 4 of the present application, a common buried oxide 420 is shown, but the regions of different crystal orientation are not both disposed directly on layer 420. As such, AAPA does not anticipate the claimed structures.

The foregoing remarks clearly demonstrate that the applied references do not teach each and every aspect of the claimed invention, as required by King and Kloster Speedsteel; therefore the claims of the present application are not anticipated by the disclosures of Aoki et al. and AAPA. Applicants respectfully submit that the instant §102 rejections have been obviated and withdrawal thereof is respectfully requested.

With respect to the § 103 rejection, applicants submit that the claims of the present invention are not rendered unpatentable by AAPA since AAPA does not teach or suggest applicants' claimed structure. AAPA, by itself, is defective since the applied reference does not teach or suggest structure in which the semiconductor regions of different crystal orientation are disposed on a common buried insulating layer. Applicants refer the Examiner to the above remarks concerning AAPA and thus those remarks are fully incorporated herein by reference.

The § 103 rejection also fails because there is no motivation in AAPA which suggests modifying the disclosed structure to include the various elements recited in the claims of the present

invention. Thus, there is no motivation provided AAPA, or otherwise of record, to make the modification mentioned above. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Vaeck, 947 F.2d, 488, 493, 20 USPQ 2d. 1438, 1442 (Fed.Cir. 1991).

The rejection under 35 U.S.C. § 103 has been obviated; therefore reconsideration and withdrawal thereof is respectfully requested. Thus, in view of the foregoing amendments and remarks, it is firmly believed that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

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